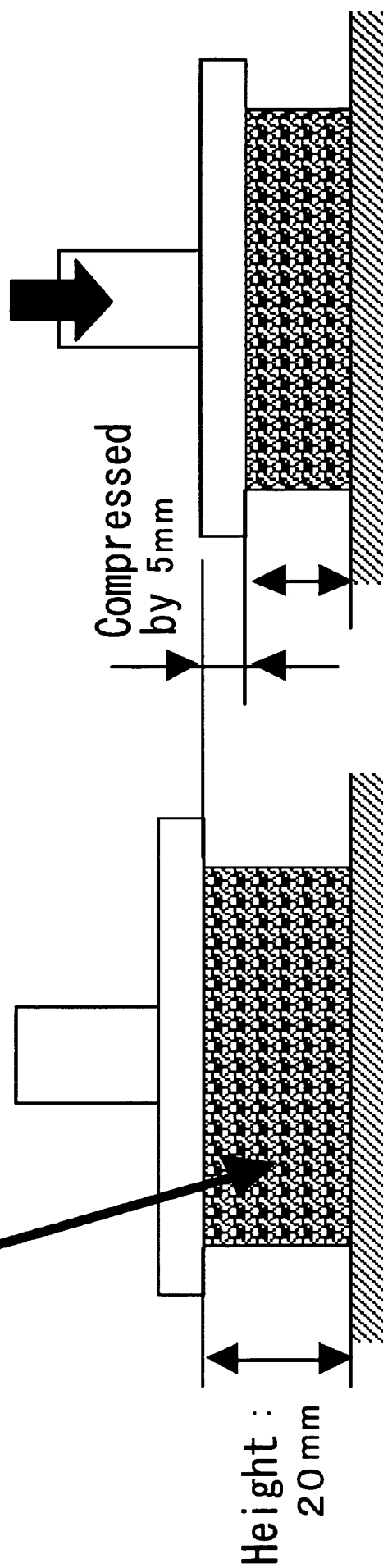


FIG. 1

Sound Absorption  
Material Cut into  
Cylinder 100mm  $\phi$

Apply a load to  
compress the sound  
absorption material

Load:  $w$



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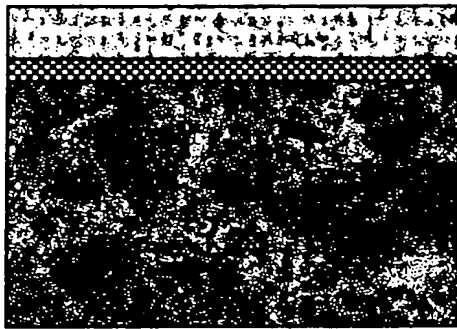
FIG. 2

Material	Area-weight g/m <sup>2</sup>	Thickness mm	Density g/cm <sup>3</sup>	Compression Repulsive Force		
				Compression Depth 2.5mm N	Compression Depth 5.0mm N	Compression Depth 7.5mm N
PET Felt	625	19	0.032	8	19	37
PET Felt	931	21	0.044	10	30	57
PET Felt	1220	20	0.062	16	53	97
PET Felt	1518	21	0.072	13	52	115
PET Felt	2019	21	0.096	14	81	181
PET Felt	2511	20	0.126	22	153	513
PET Felt	2681	19	0.141	30	290	777
RSPP	1063	19	0.055	7	24	39
RSPP	1263	20	0.063	13	45	89
RSPP	1616	20	0.081	30	88	158
RSPP	2161	21	0.105	40	137	259
RSPP	2442	21	0.118	50	153	304
RSPP	2676	21	0.127	49	187	363
PUF	820	20	0.041	18	22	30
PUF	802	20	0.040	21	29	38
PUF	823	19	0.043	17	21	27
PUF	1004	21	0.048	17	21	26

FIG. 3

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Structure

1Air-Impermeable  
Resonance Layer 3

Adhesive Layer 4

Sound Absorption  
Layer 2

FIG. 4

Vehicle Interior

Vehicle Exterior  
(Engine Room)

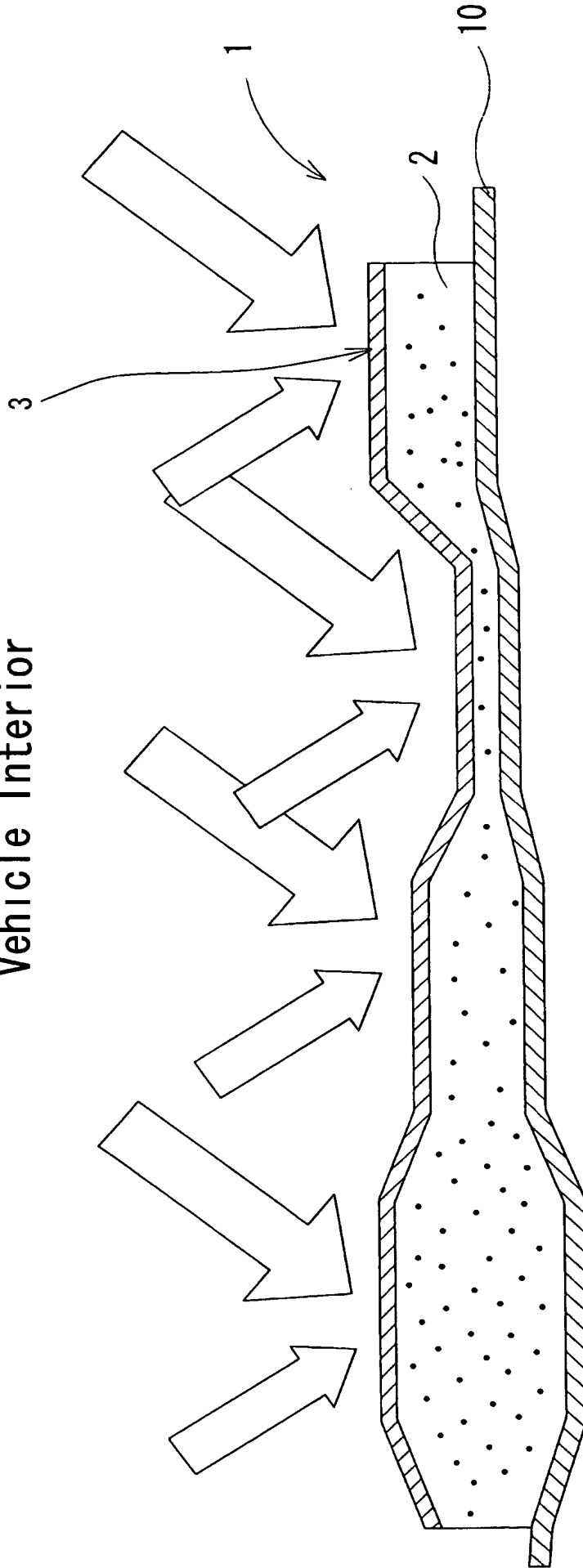
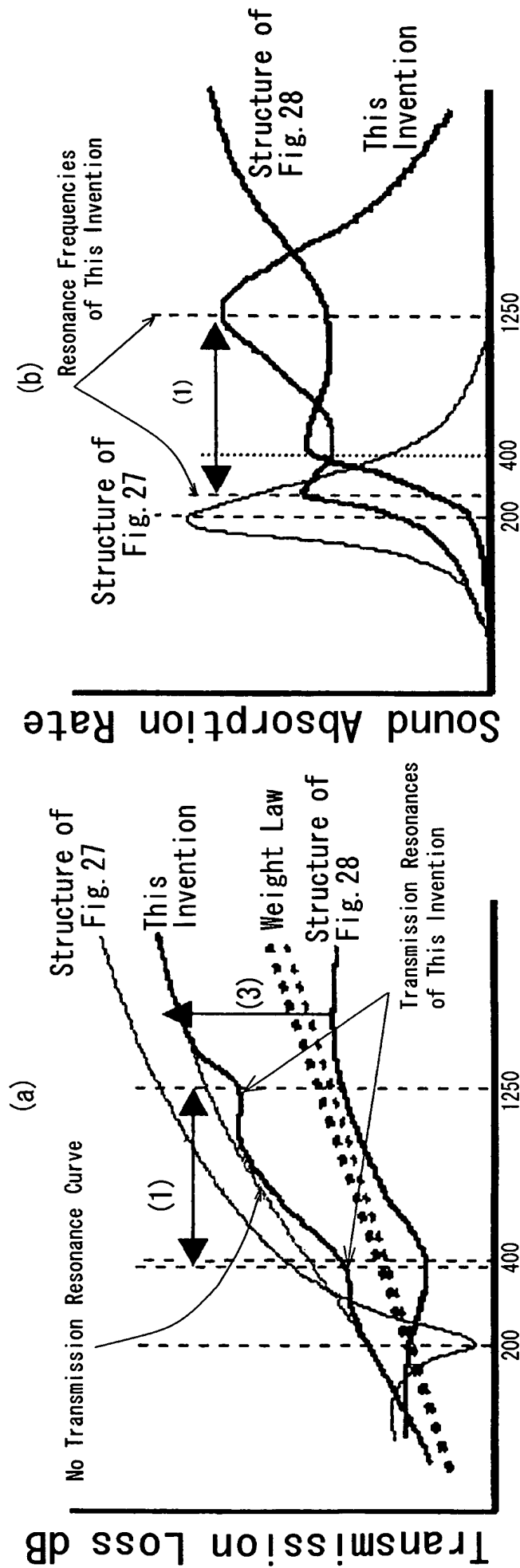


FIG. 5

# Comparison between this Invention and Prior Art Structures



1/3 Octave Band Frequency Hz

1/3 Octave Band Frequency Hz

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FIG. 6

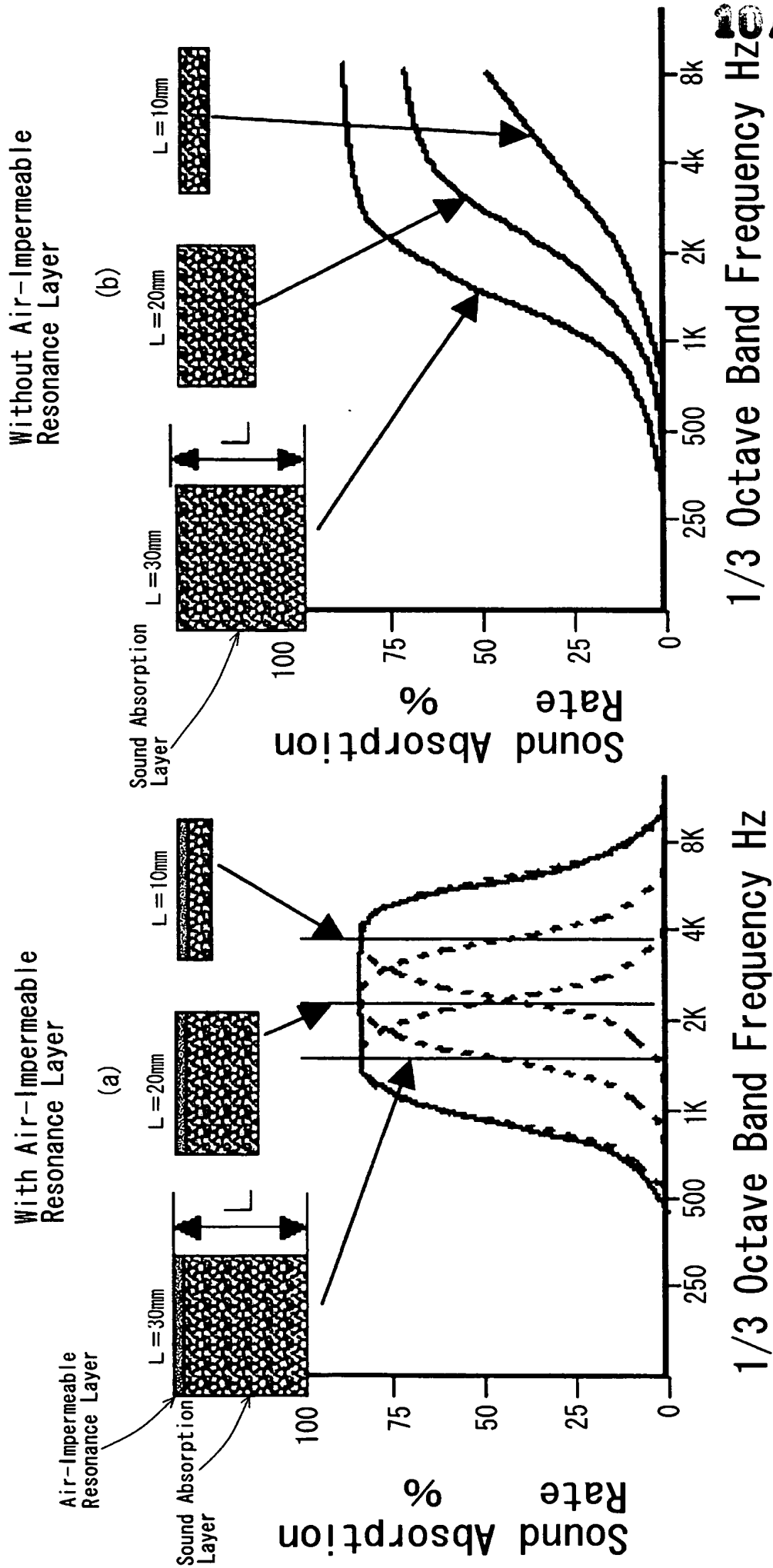
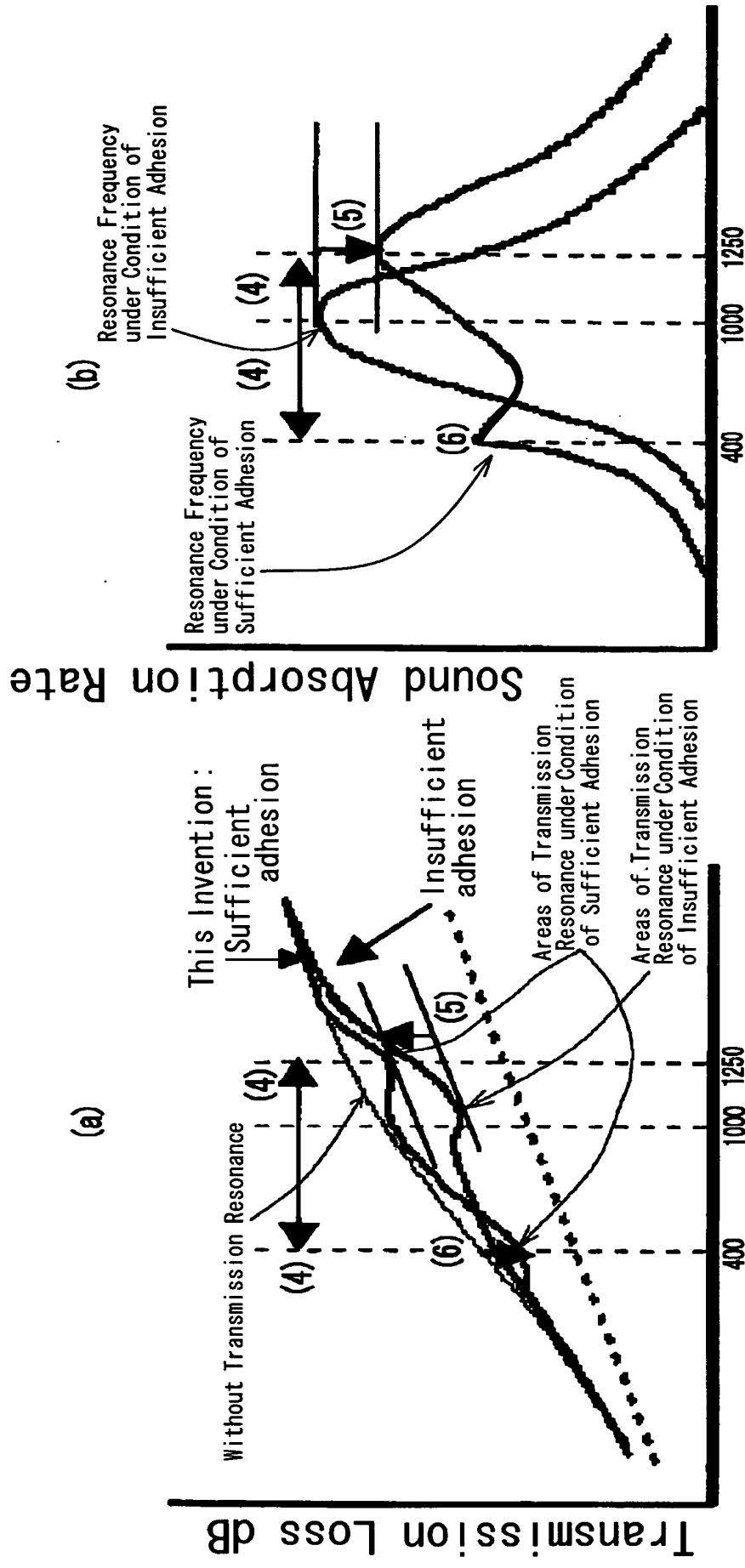


FIG. 7

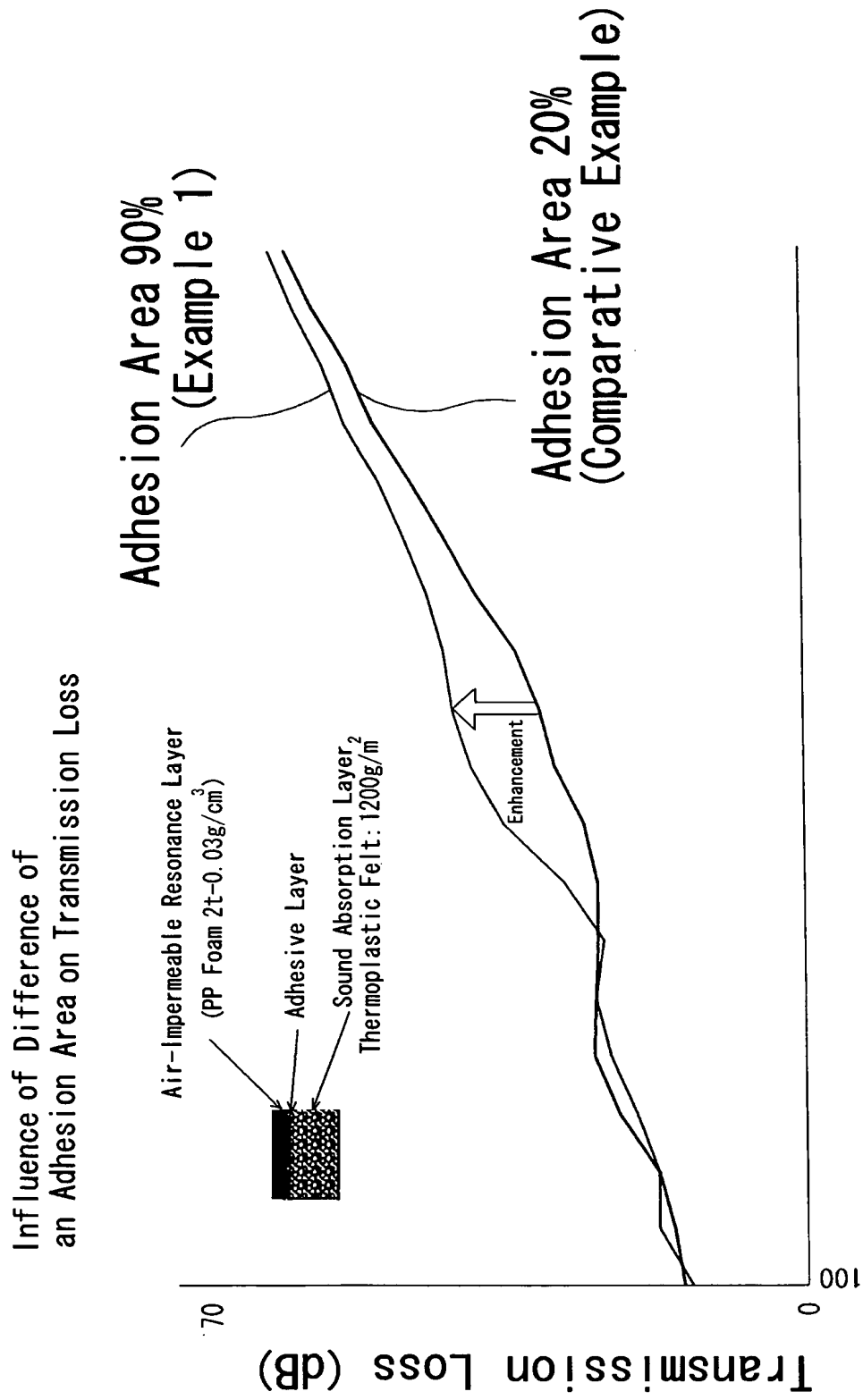


1/3 Octave Band Frequency Hz

1/3 Octave Band Frequency Hz

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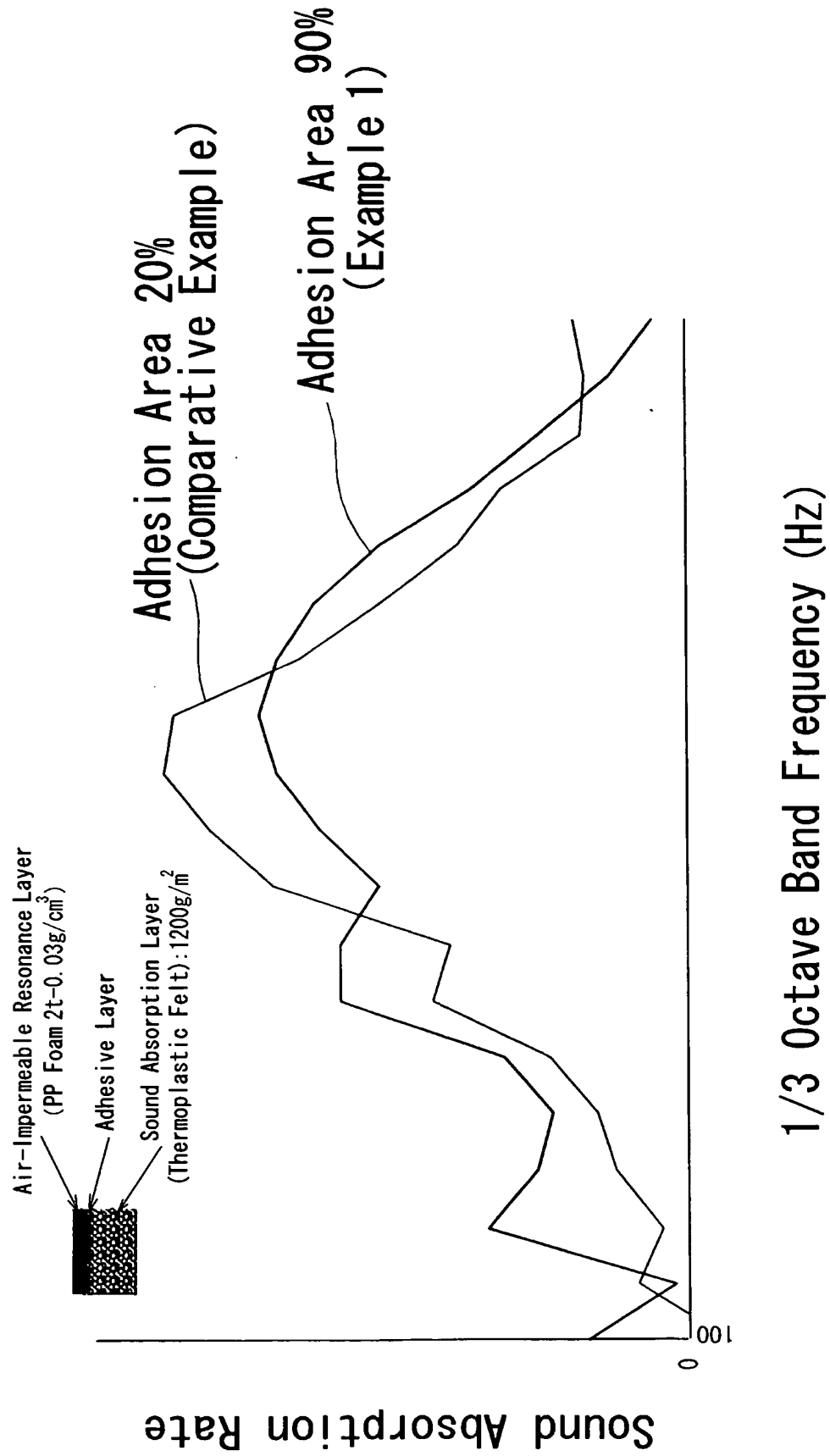
FIG. 8



1/3 Octave Band Frequency (Hz)



FIG. 9

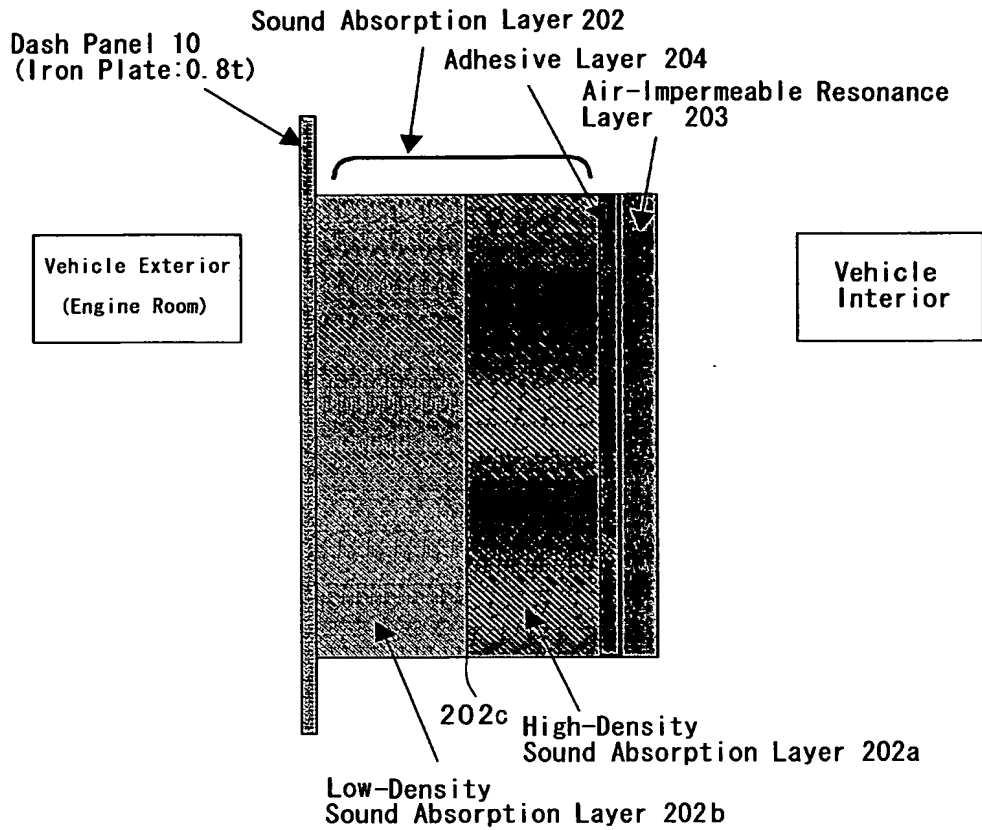


# FIG. 10

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(a)

Dash Silencer 201



(b)

Dash Silencer 301

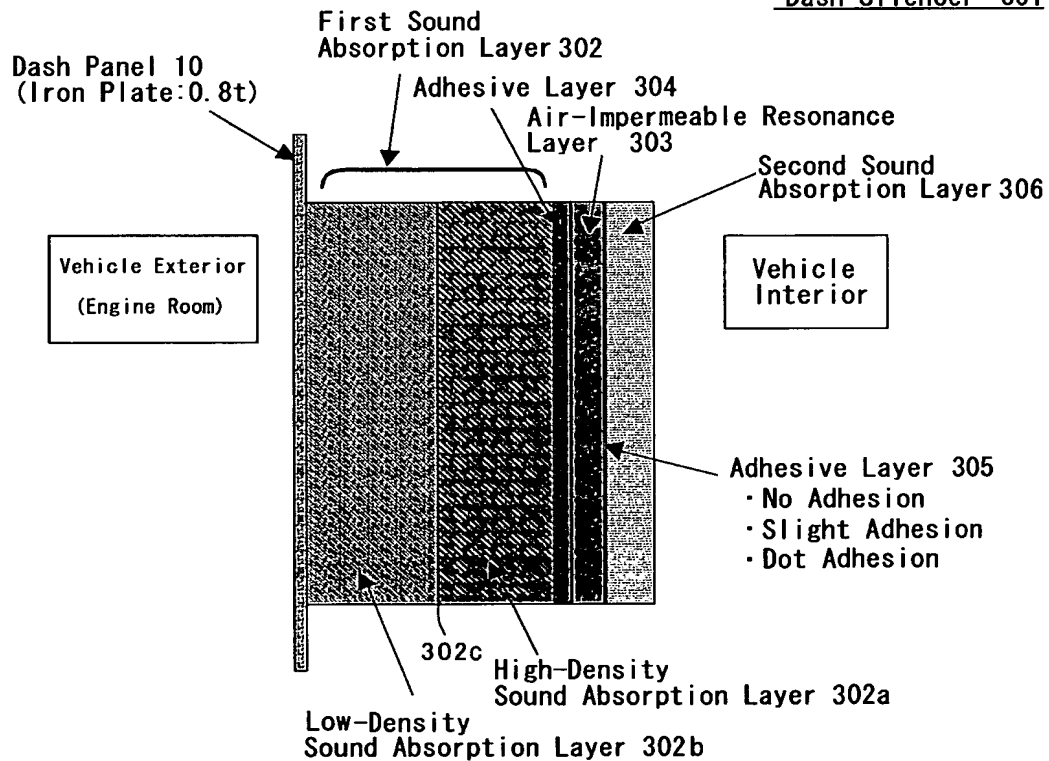
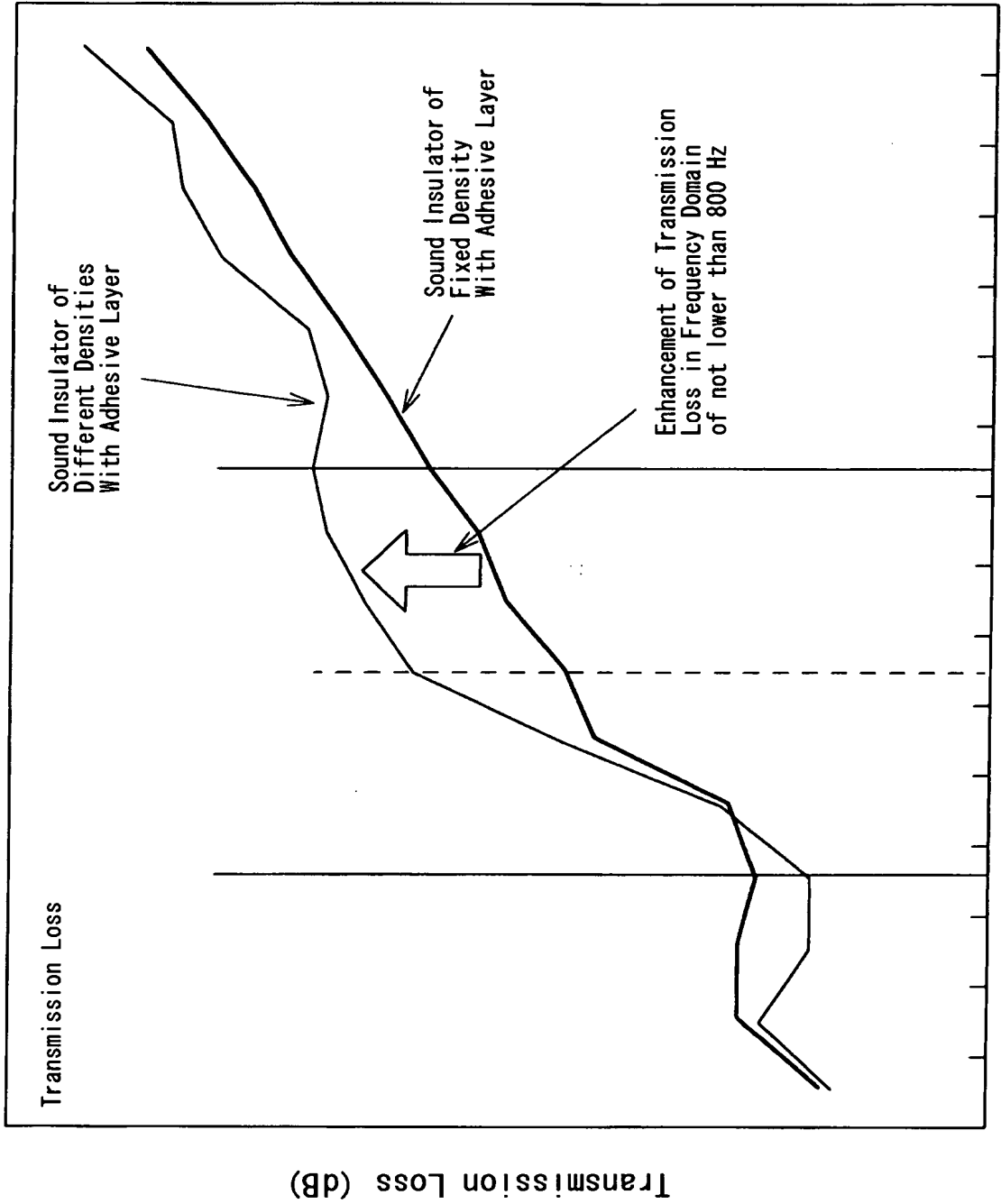


FIG. 11



1/3 Octave Band Frequency (Hz)

FIG. 12

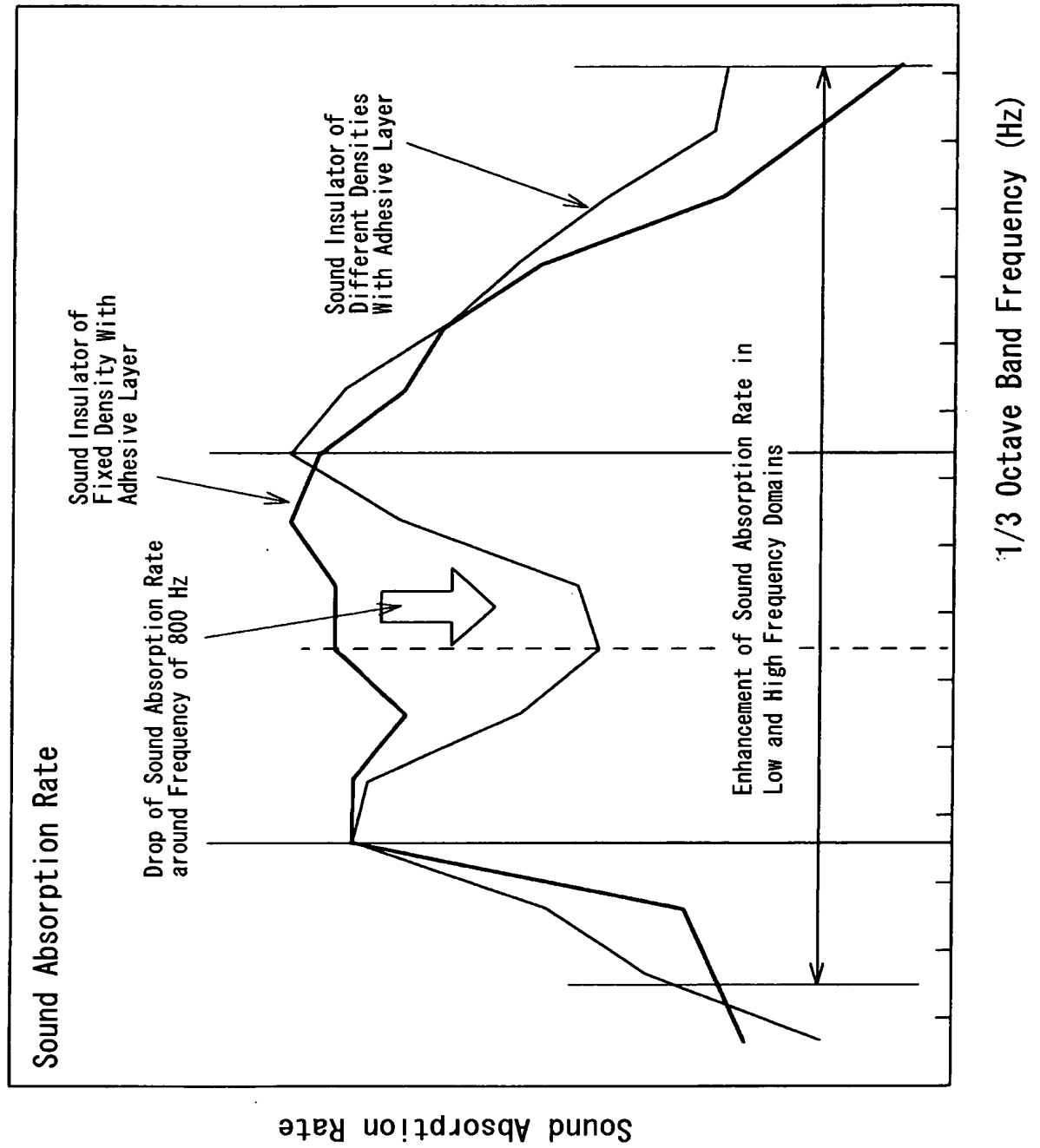


FIG. 13

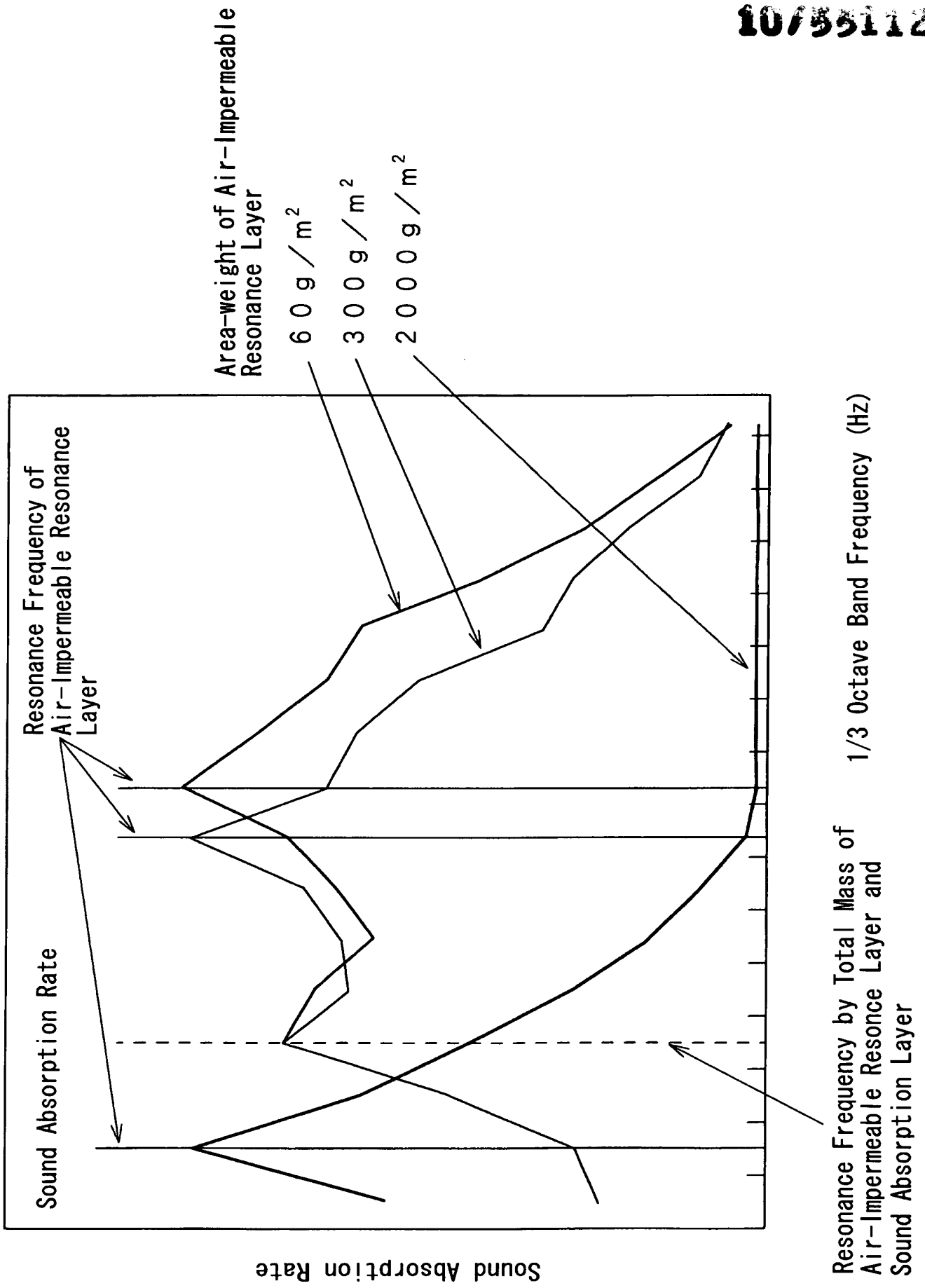


FIG. 14

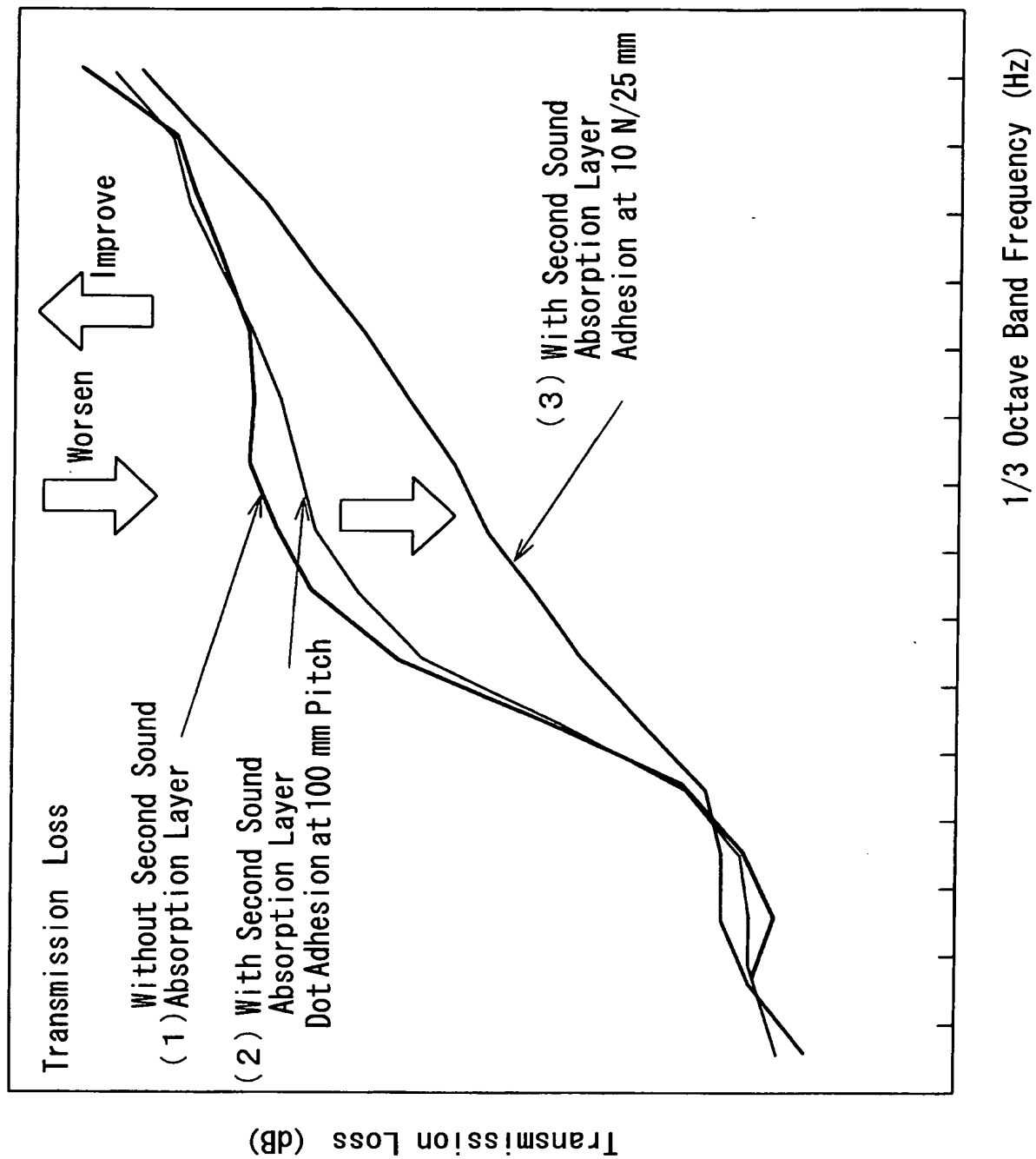


FIG. 15

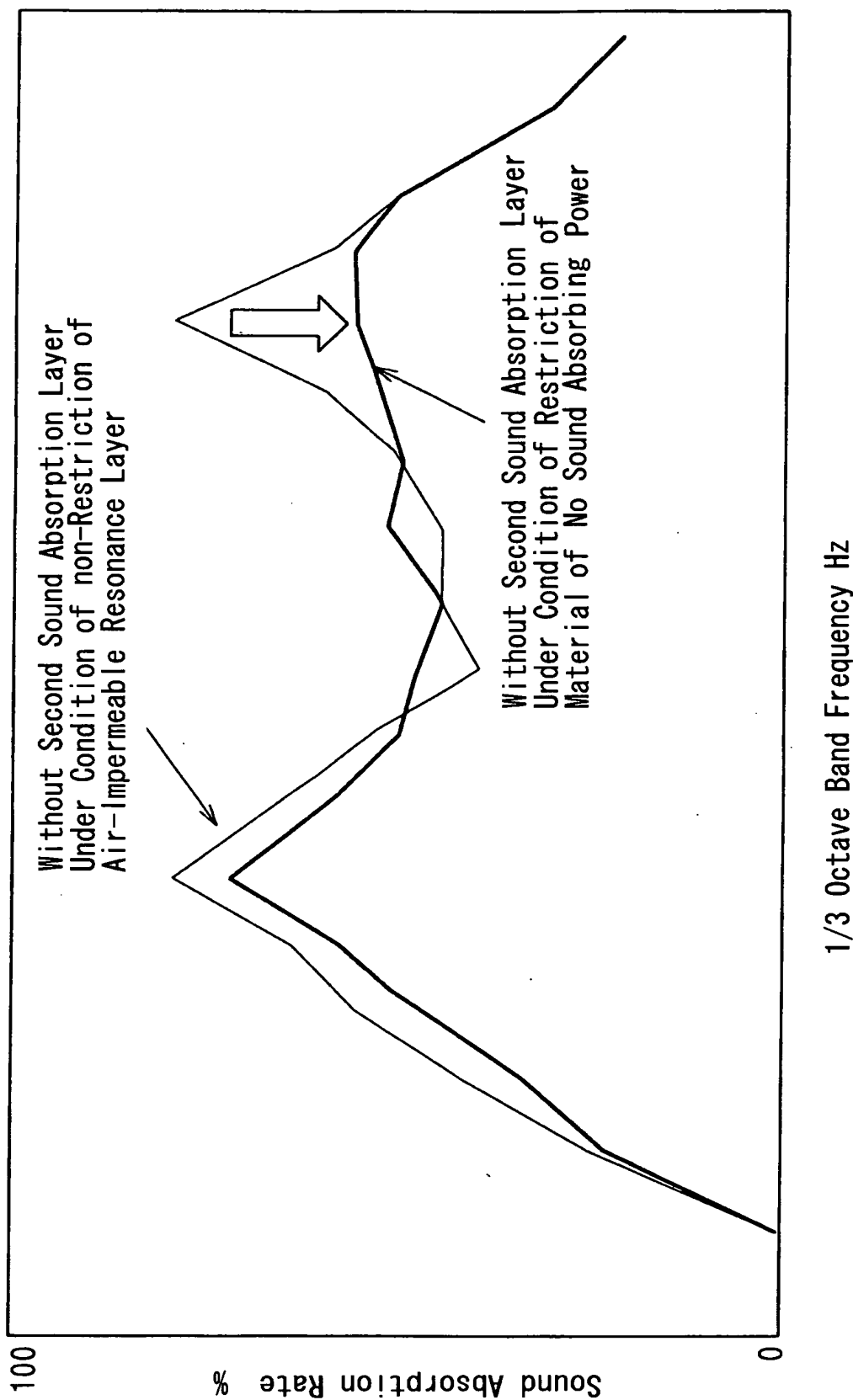
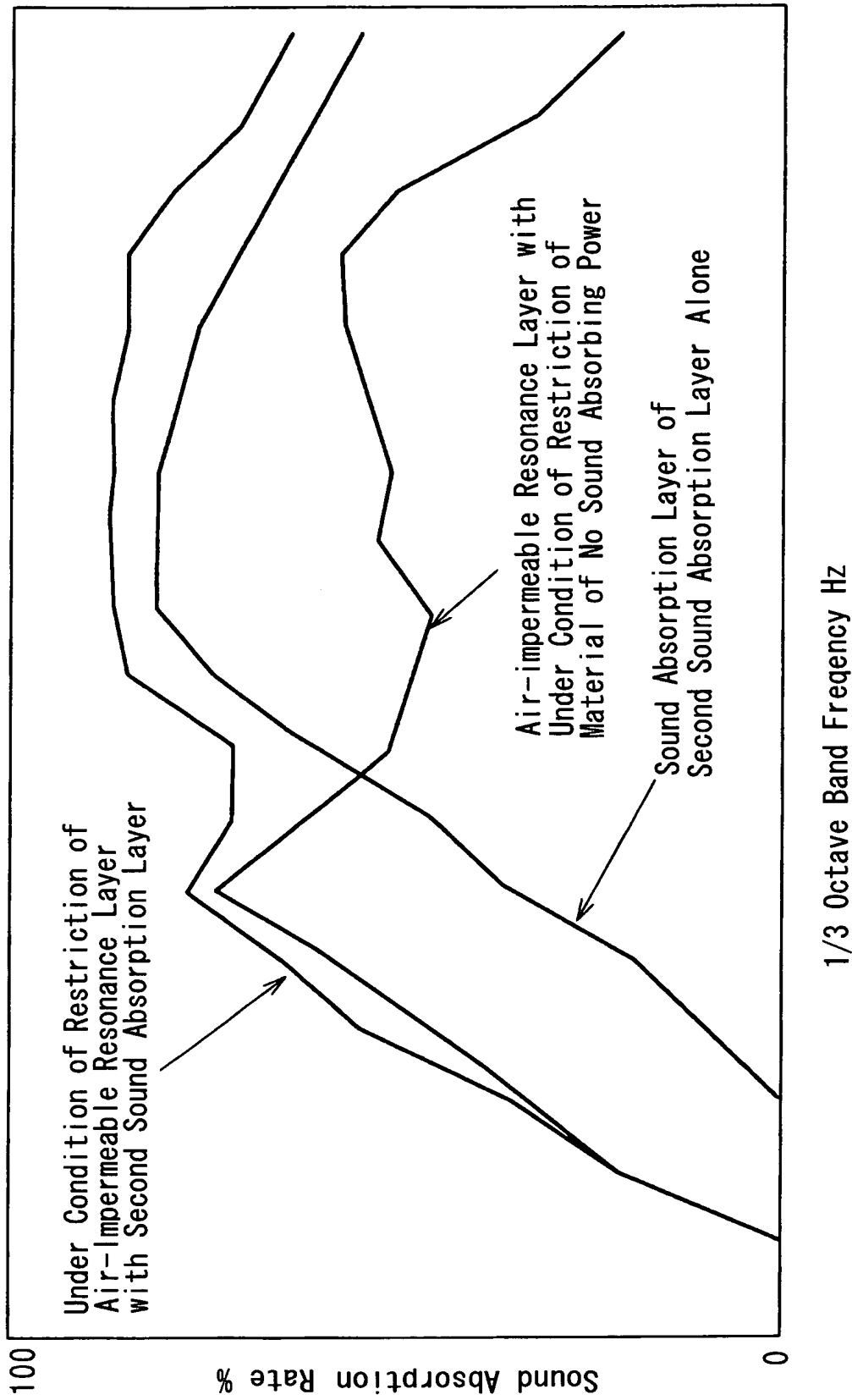


FIG. 16





100 22-0000

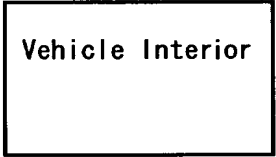


FIG. 18

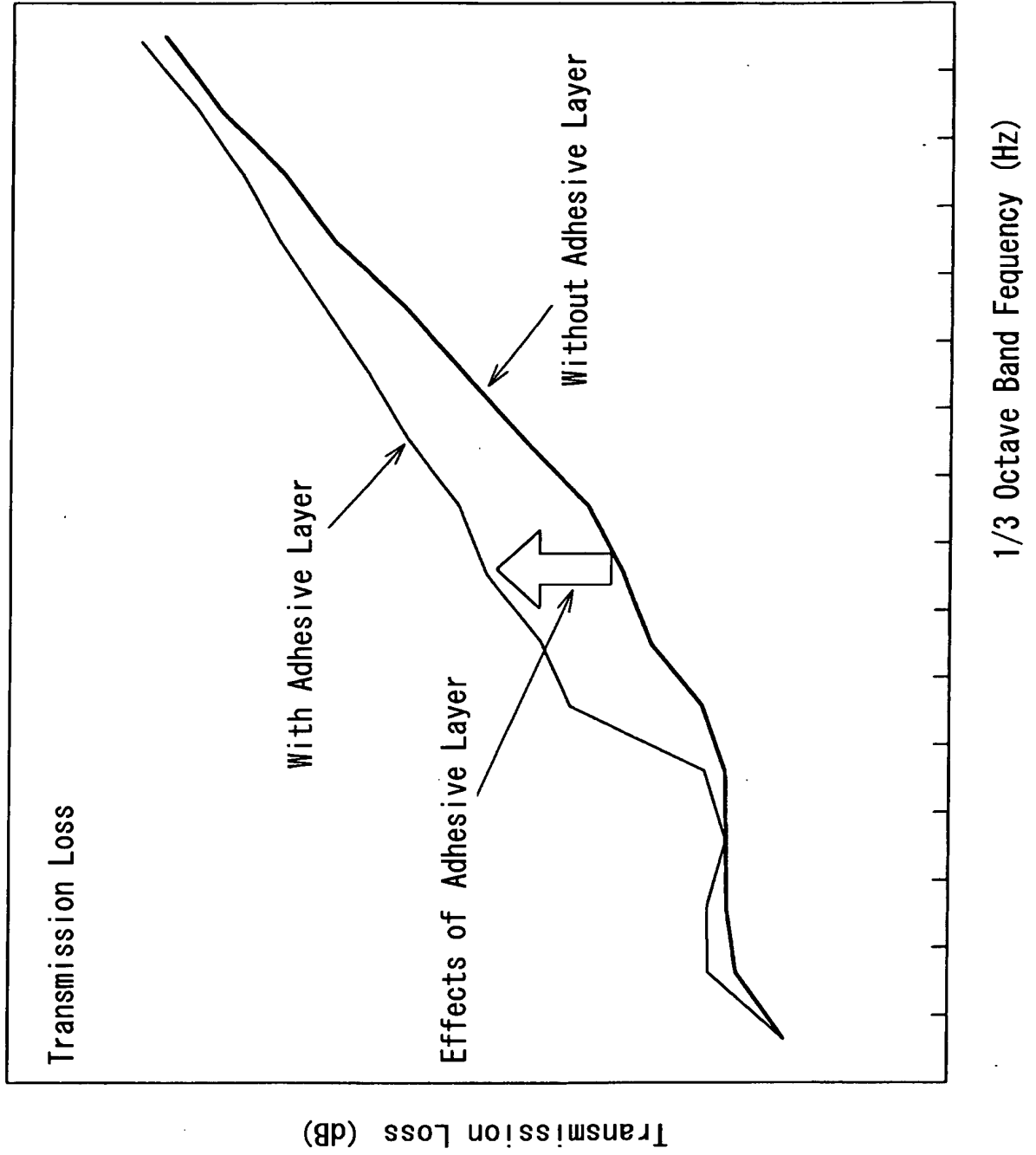


FIG. 19

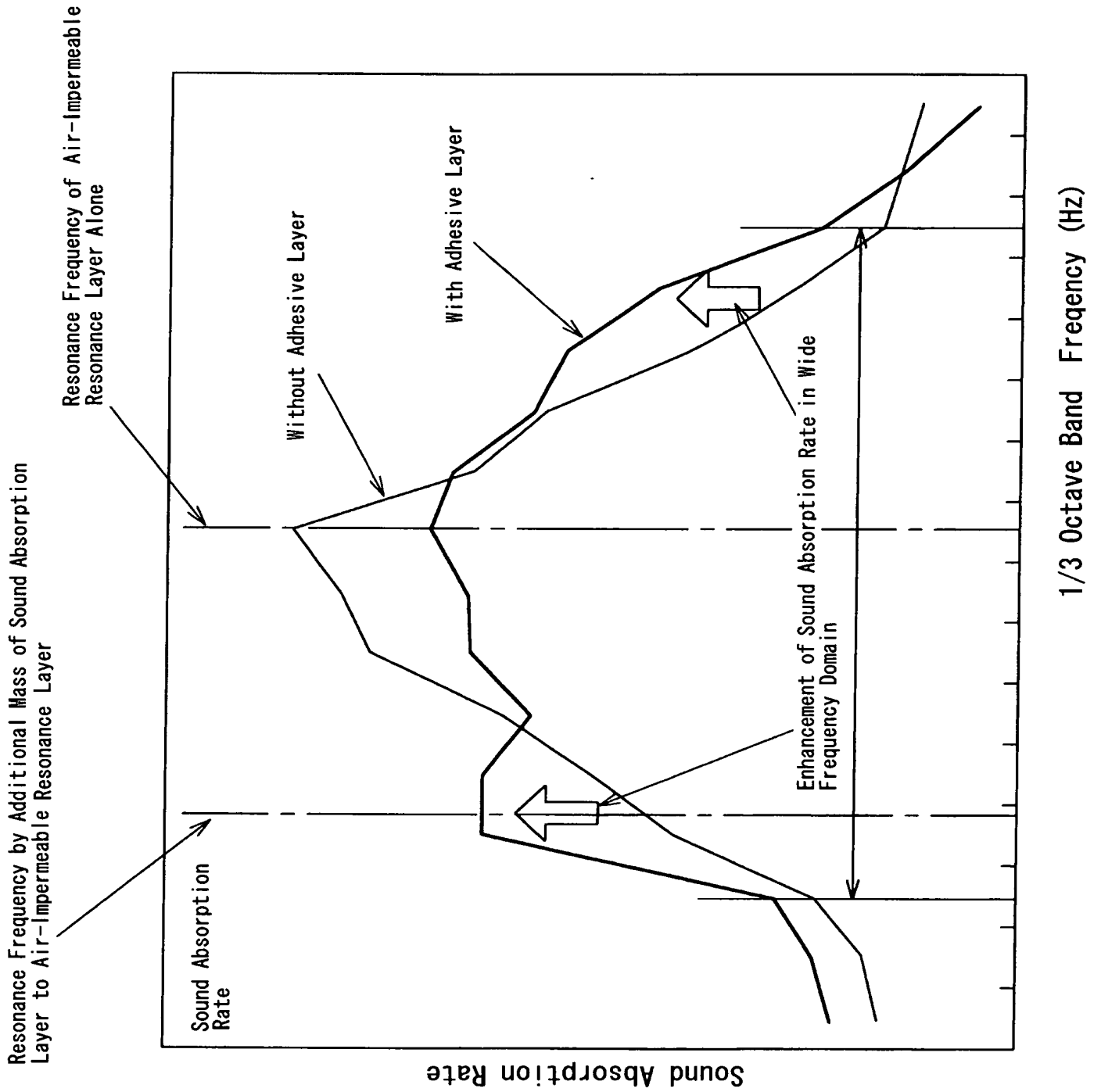
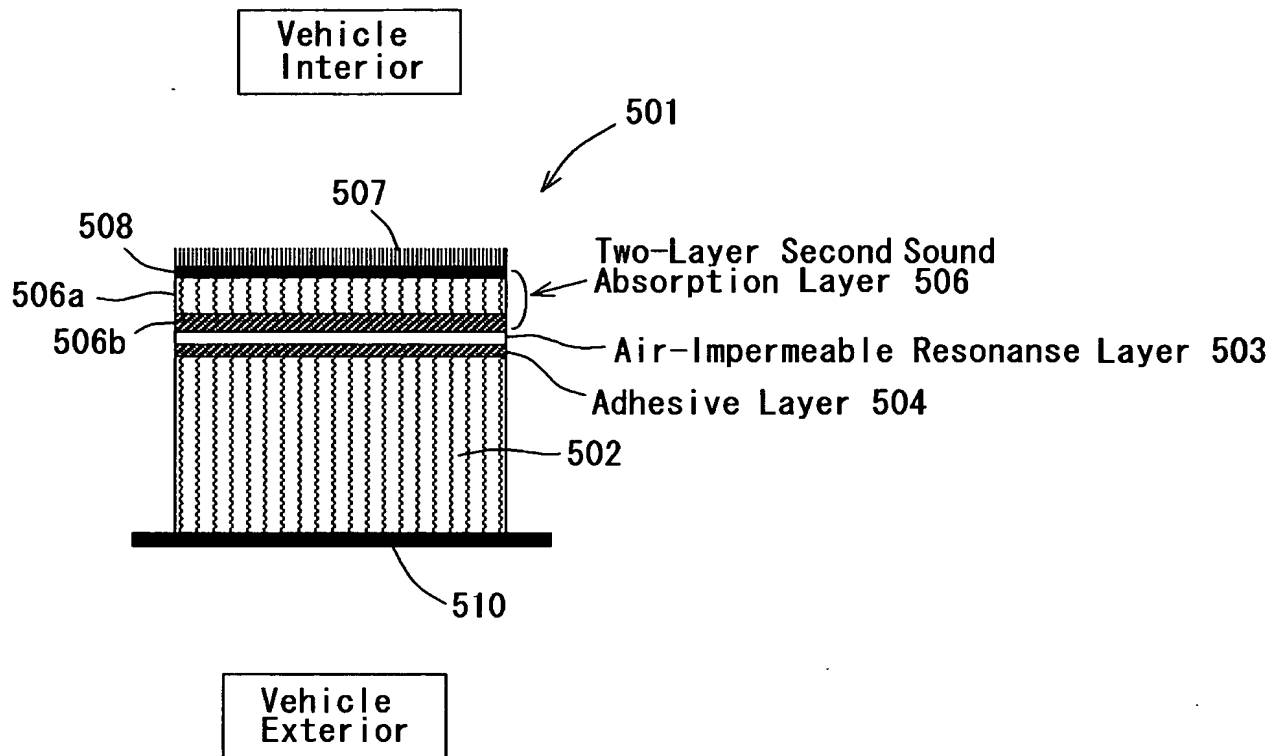


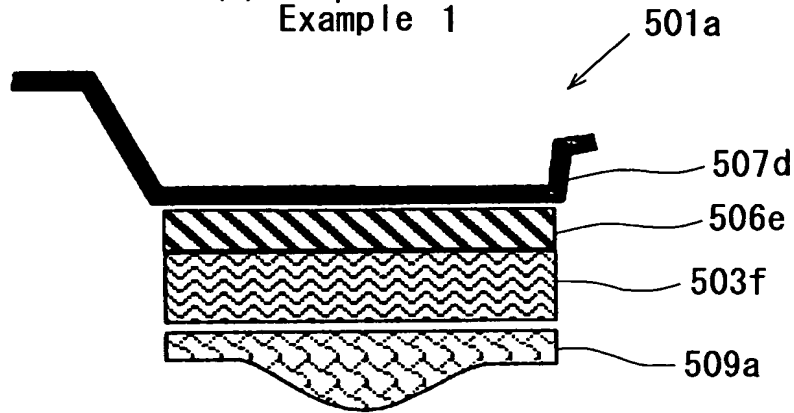
FIG. 20



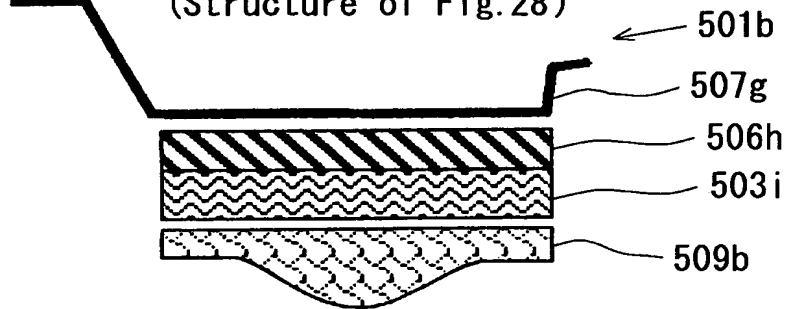
# FIG. 21

99, 100, 124

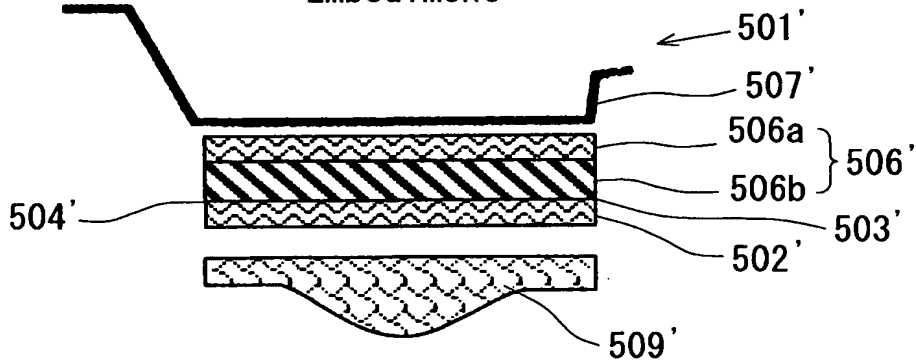
(a) Comparative Example 1



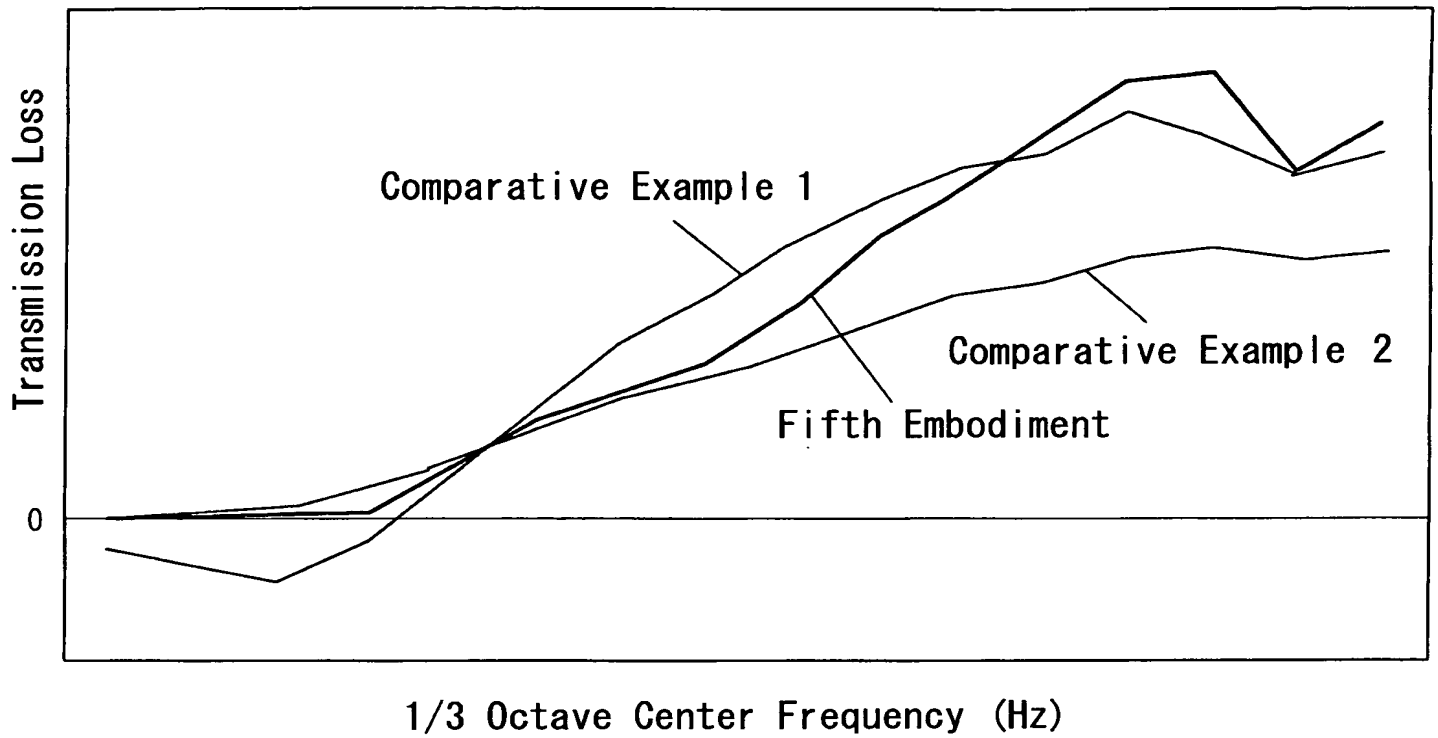
(b) Comparative Example 2  
(Structure of Fig. 28)



(c) Example of Fifth Embodiment



(a)



(b)

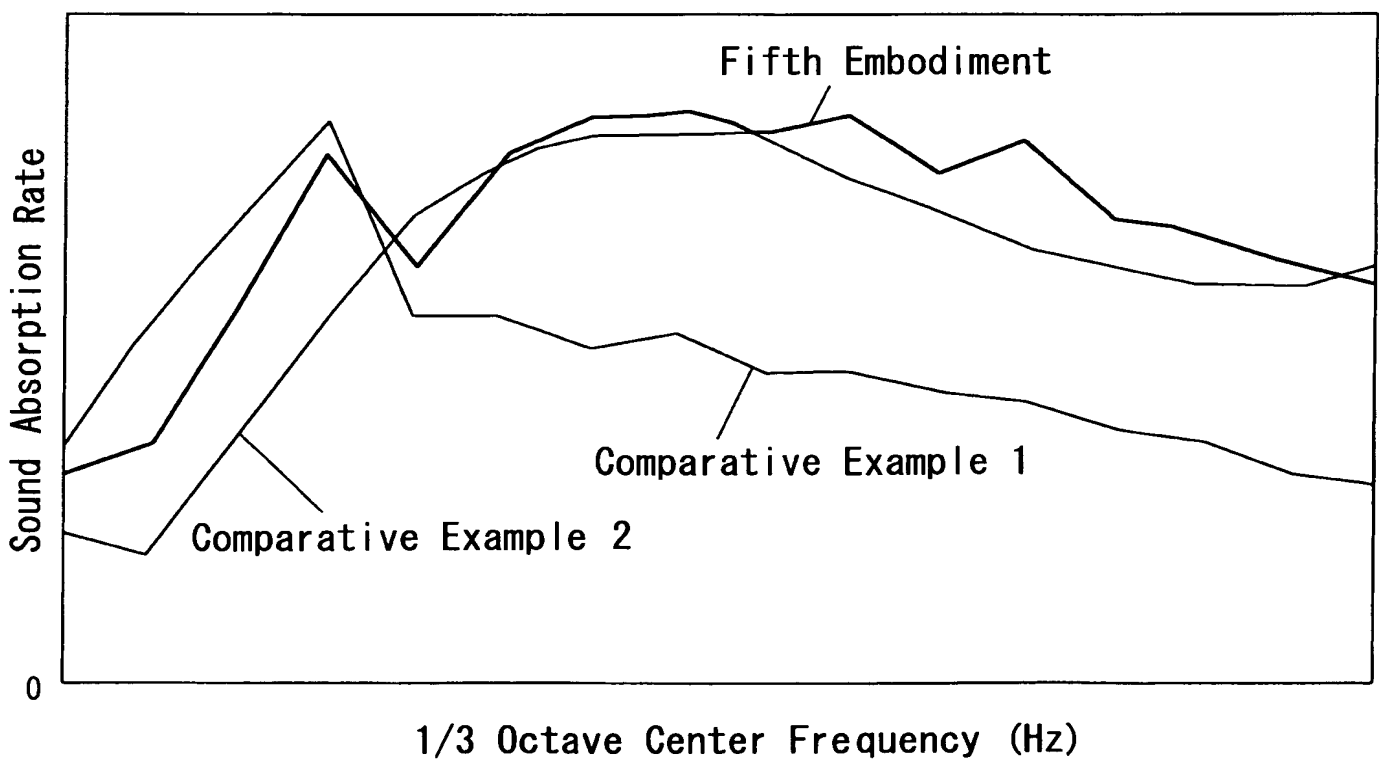
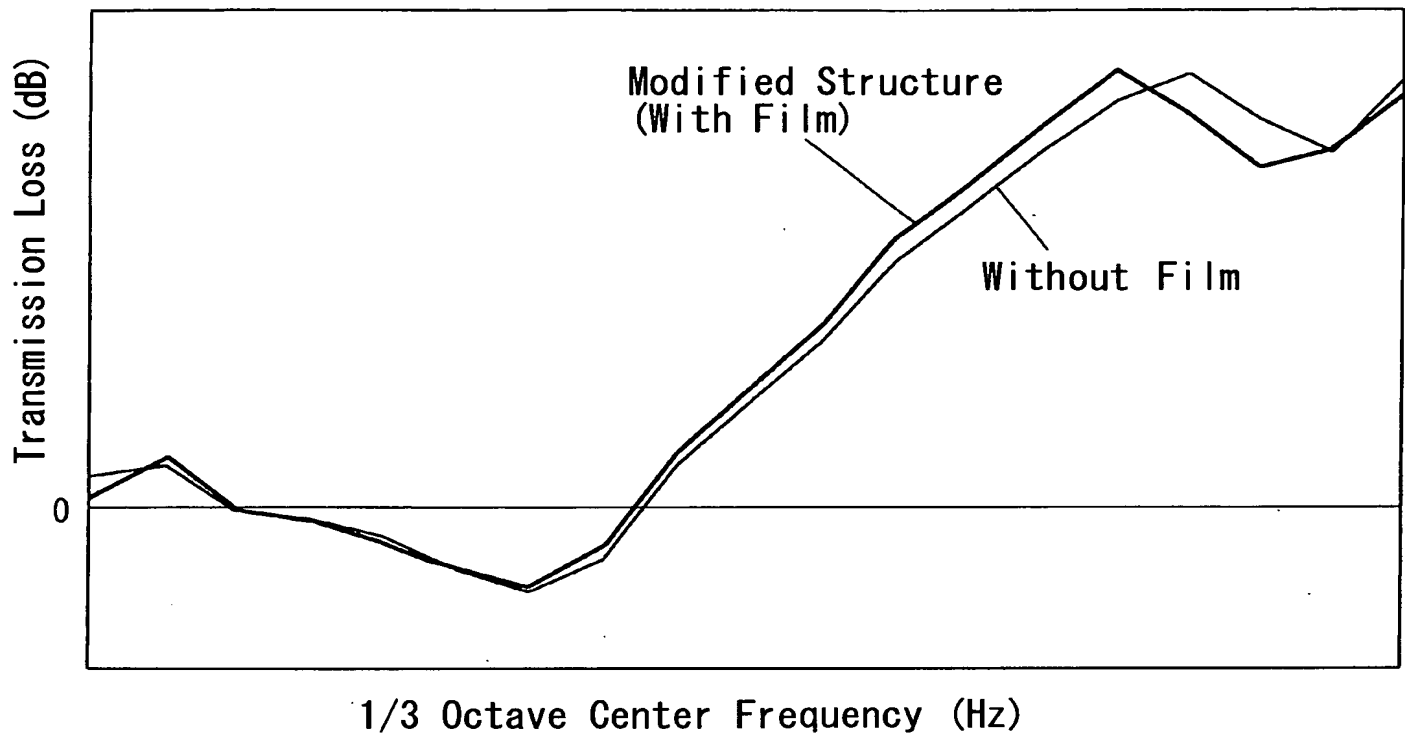


FIG. 23

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( a )



( b )

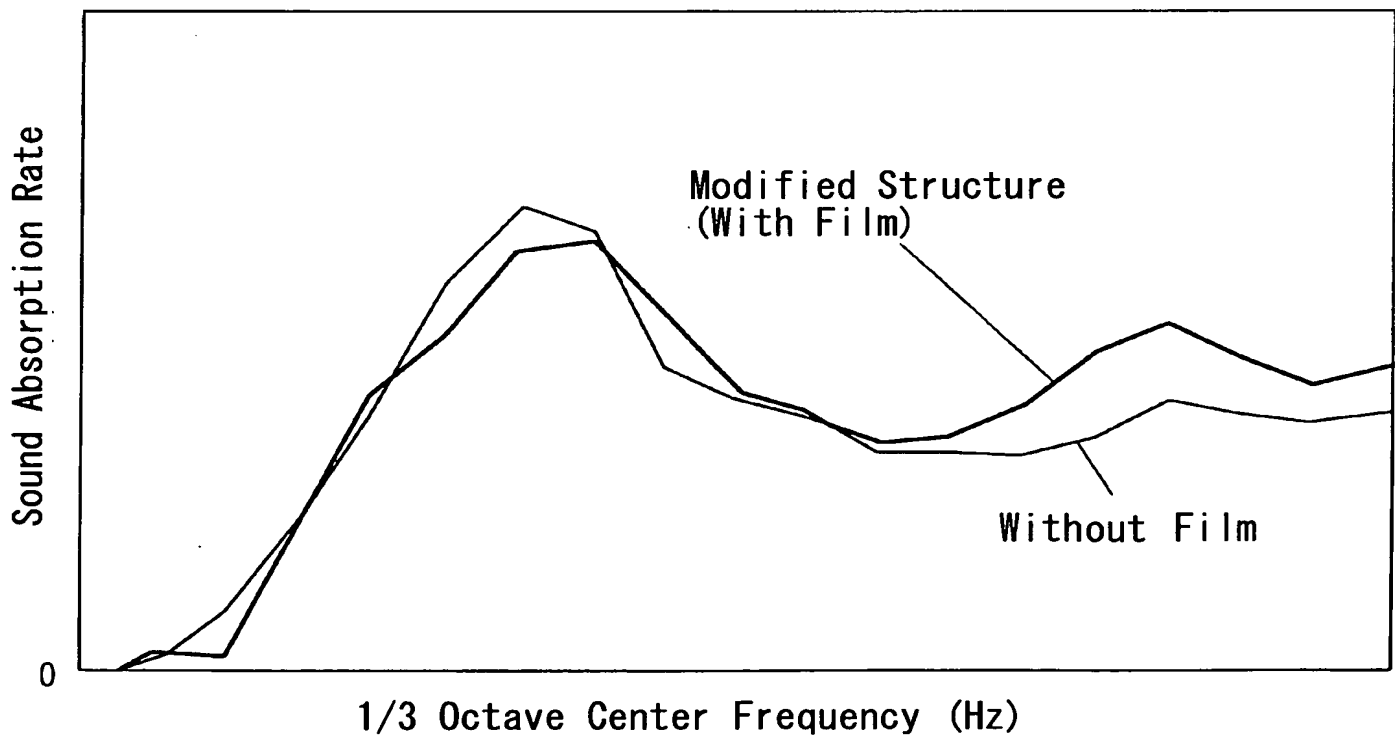


FIG. 24

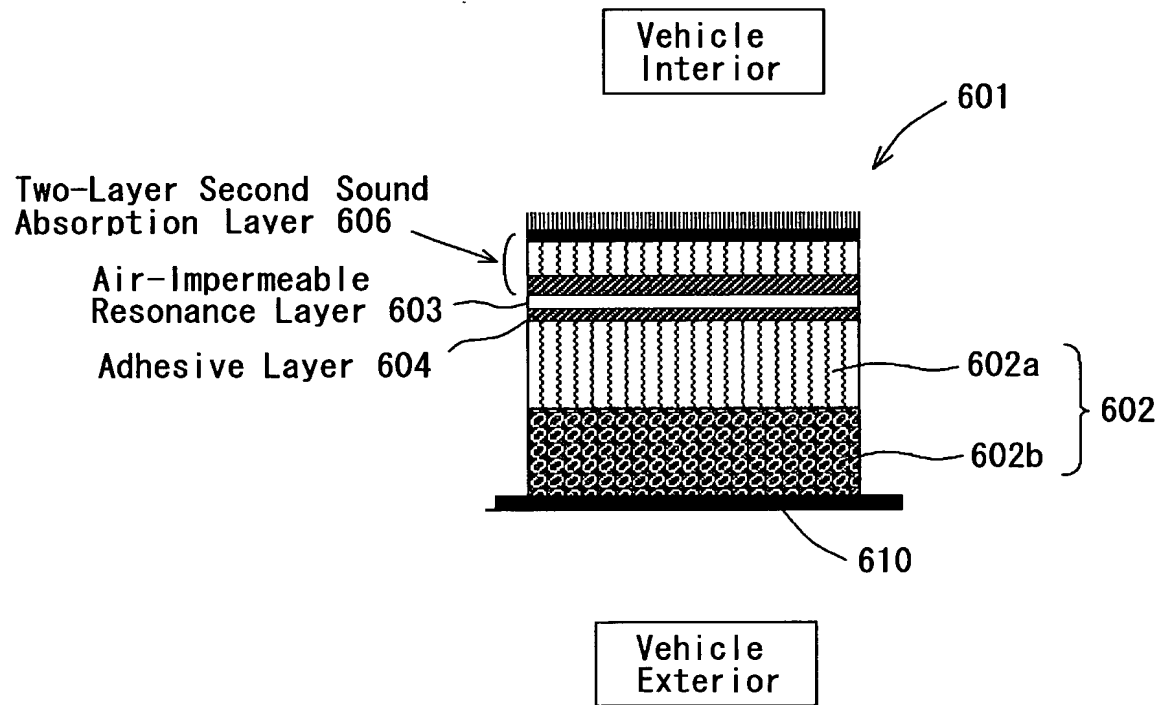




FIG. 25

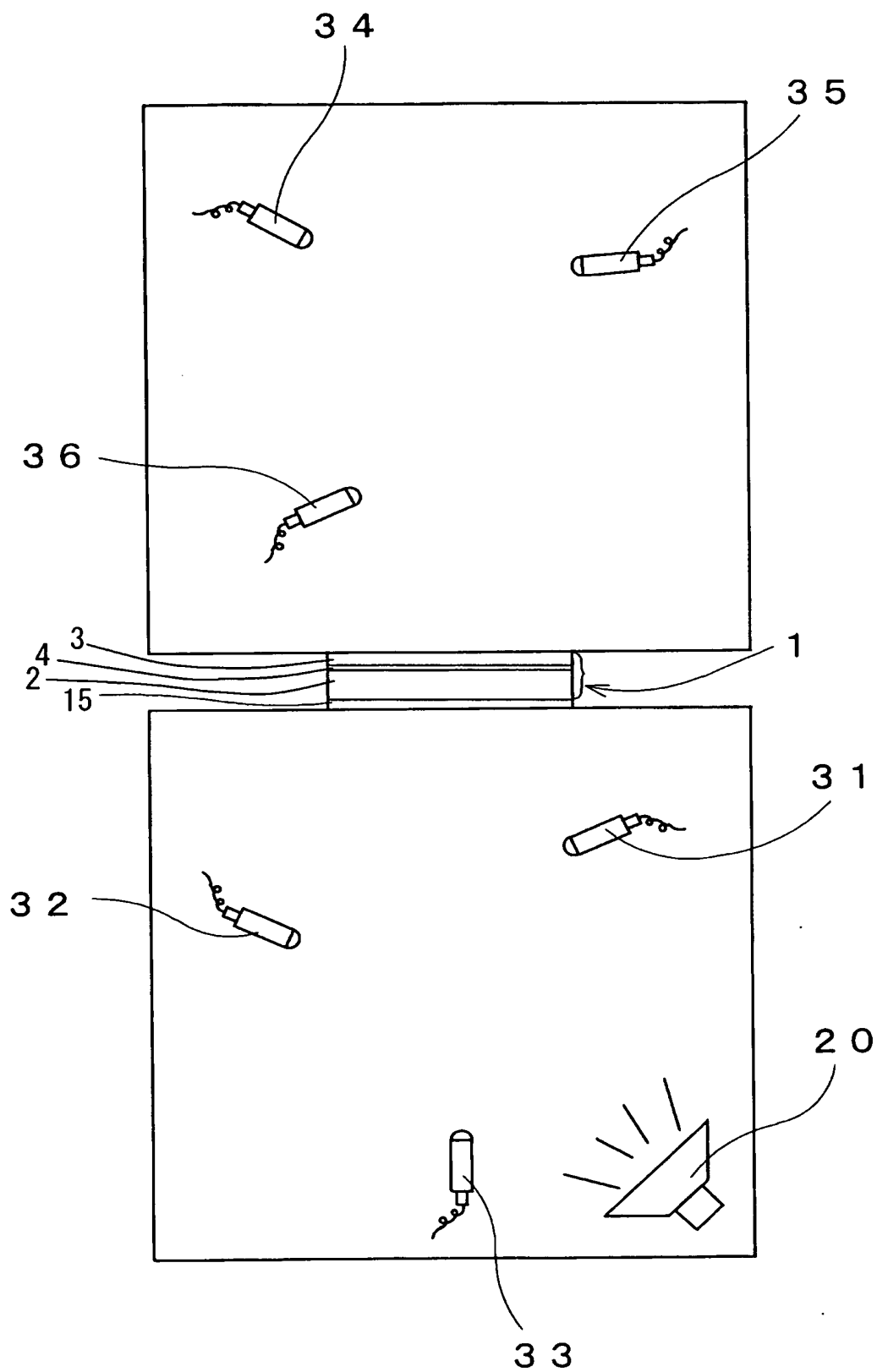
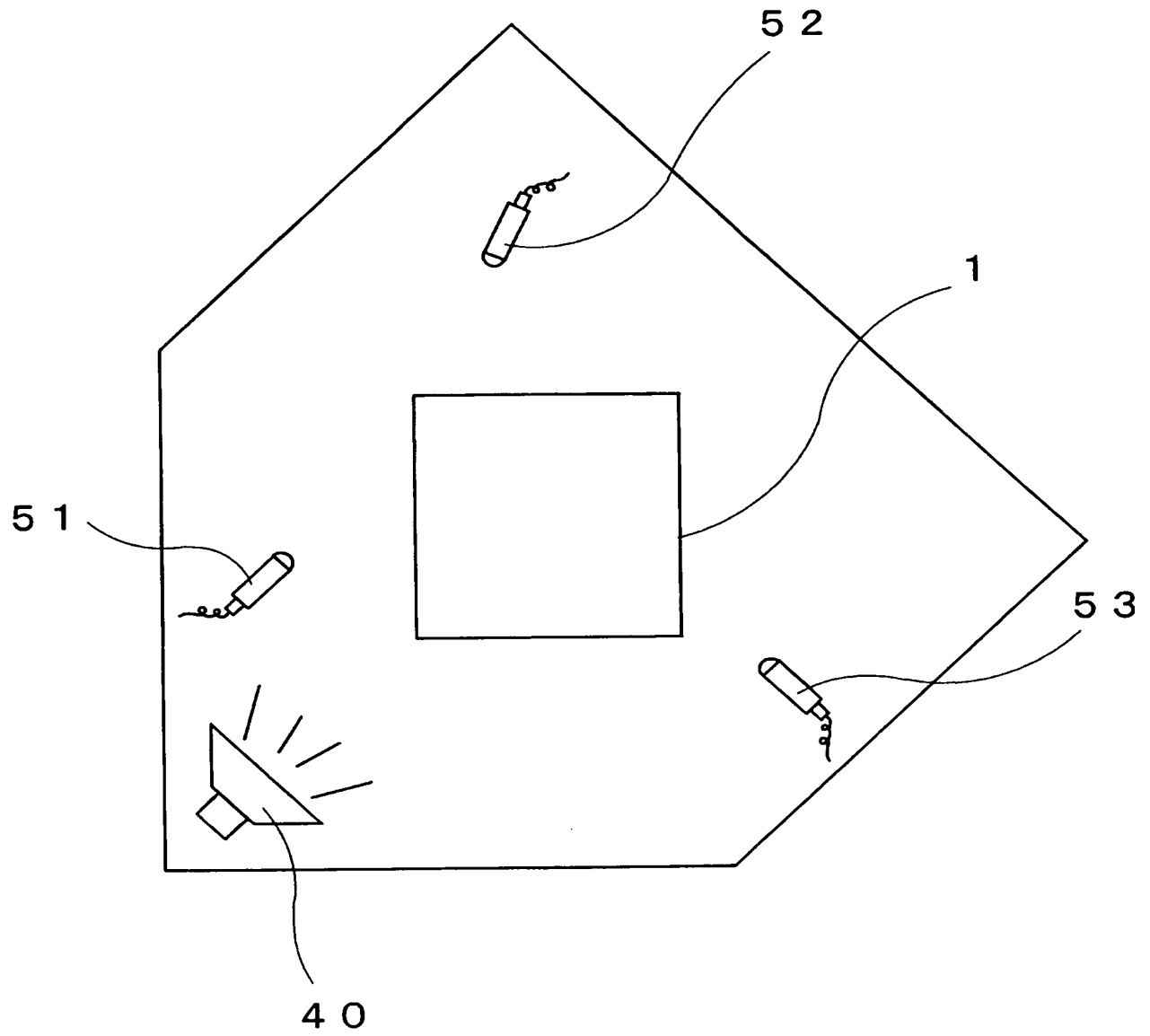
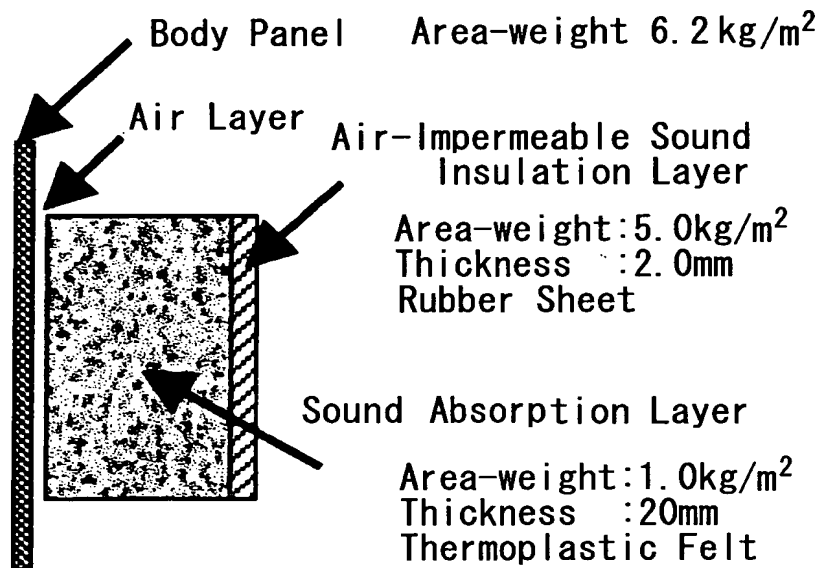


FIG. 26

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## Prior Art Sound Insulation Structure



Structure of Patent Publication Gazette No. 2000-516175

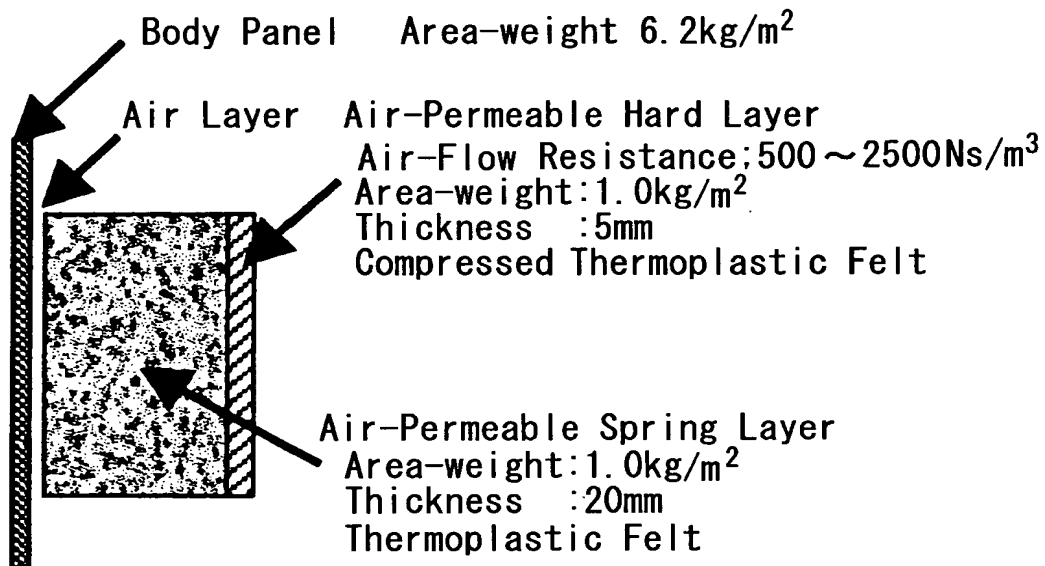


FIG. 29

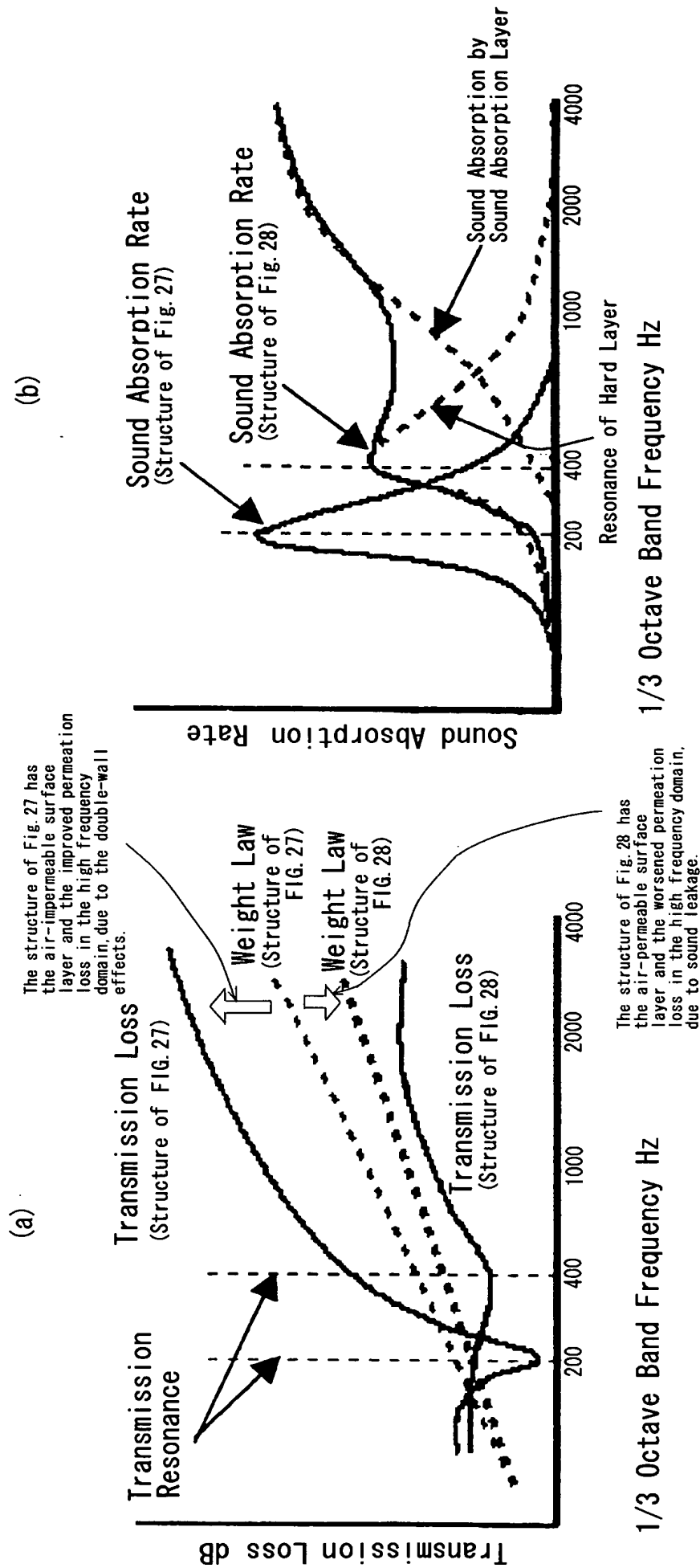


FIG. 30

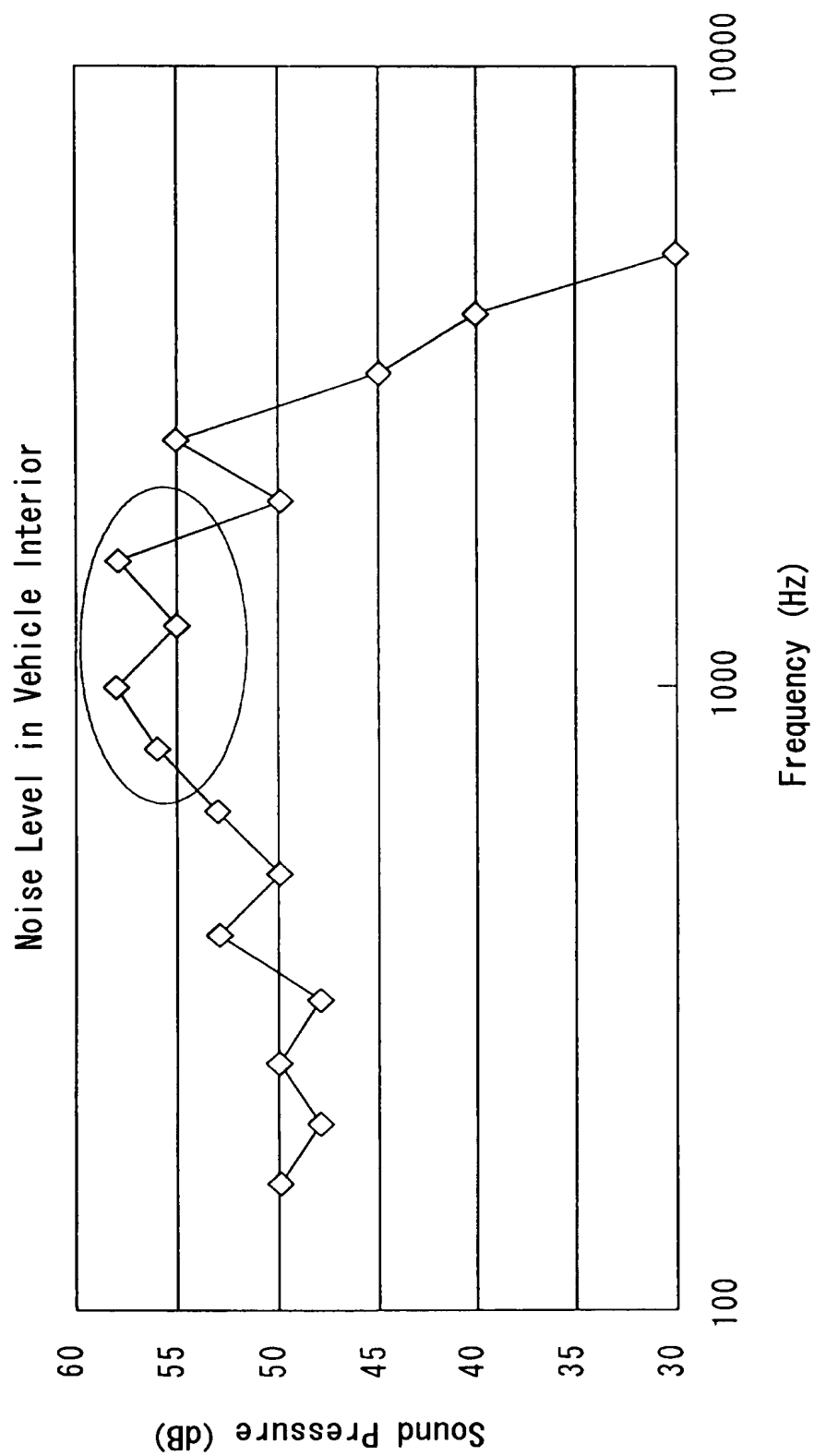


FIG. 31

